

Supporting information

Table S1. Ion concentrations (mg kg^{-1}) of leaf dry matter, sampled during the summer (August) in the Mediterranean site (Med) and the semi-arid site (SA). Sampled leaves were analyzed using inductively coupled plasma - atomic emission spectroscopy (ICP-AES, Arcos, Spectro, Kleve, Germany). Cl- analyzed separately with a chloridometer (chloride analyzer 926, Corning, Medfield, MA).

Ion (mg kg^{-1})	Site	
	Mediterranean	Semi-arid
Na	91 \pm 4.4	310.3 \pm 47
P	1328.3 \pm 62.7	1202.6 \pm 63
K	7748.5 \pm 828.2	10176.7 \pm 939.1
S	1428.6 \pm 34.5	1240.4 \pm 64.4
Mg	4483.3 \pm 446	4773 \pm 367.2
Mn	99 \pm 14	191.7 \pm 20.9
Zn	26 \pm 1.3	25.1 \pm 1.7
Ca	11488.6 \pm 47	11422.8 \pm 132.8
Fe	62.3 \pm 13.9	79.2 \pm 9.8
B	52.2 \pm 3	71.8 \pm 12.8
Cl	4791.5 \pm 825	3389.6 \pm 383.1

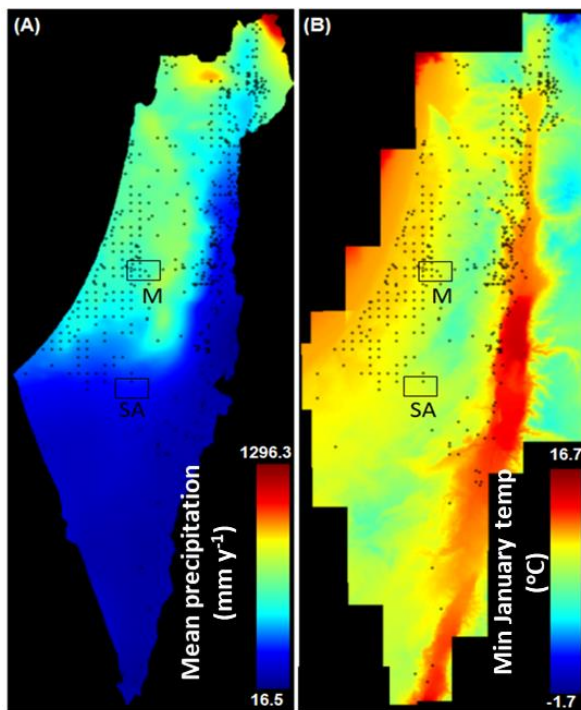


Fig S1. BioGIS diversity analysis based, 2018 (Geographical Information System established to create a national database of flora and fauna of Israel), shows the distribution of the *Ziziphus spina-christi* against the average annual rainfall (A) and against the minimum temperature in January (B) . Each point on the maps represents a *Ziziphus spina-christi* observation, n= 590 trees

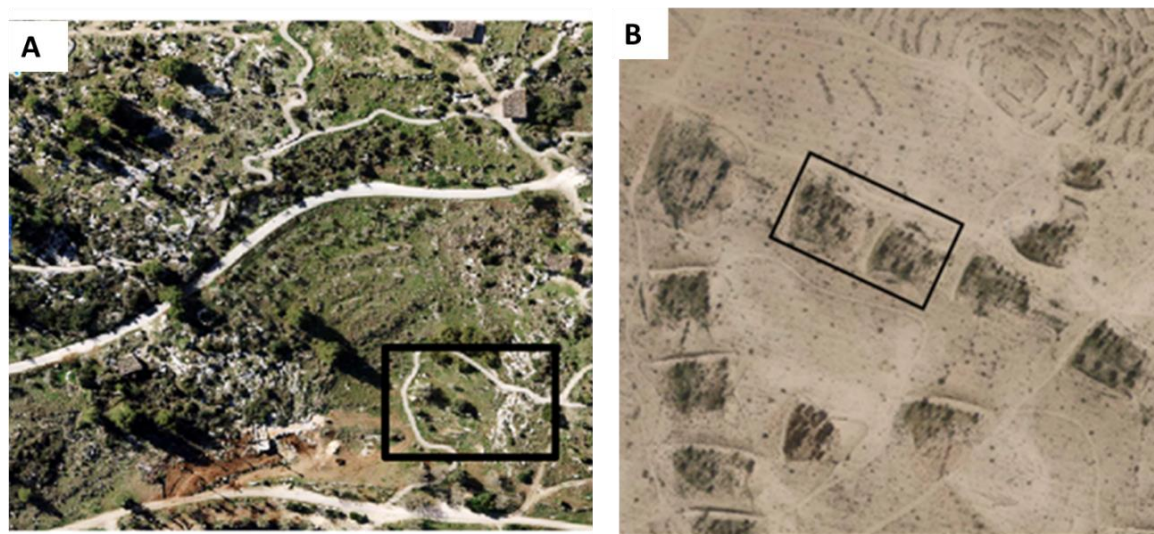


Fig S2 Aerial view of the experiment site showing the Mediterranean site-natural habitat in Neot Kedumim preserve (A) and the semi-arid site- "Ambassadors Forest."

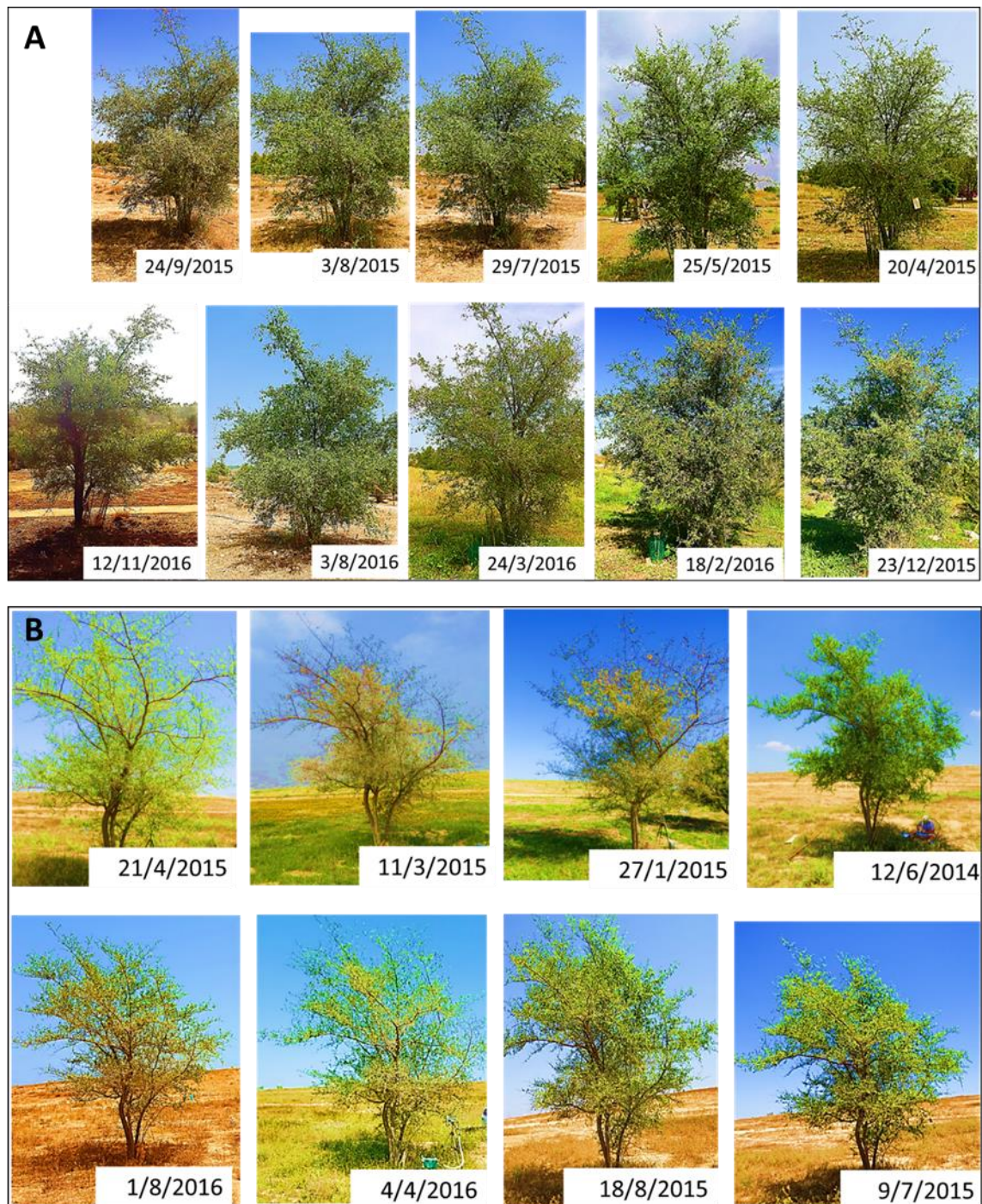


Fig S3. Images are showing the trees foliage changes throughout the study period in the Mediterranean site-natural habitat in Neot Kedumim preserve (A) and in the semi-arid site-“Ambassadors Forest” (B).

